

## Investigation of Scale Exponents of Complete and Incomplete Aggregation-Annihilation Processes

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**Abstract:** The complete and incomplete aggregation-annihilation processes are investigated with the method of generating function, and the scale exponents are obtained exactly. We find that the scale exponents of incomplete aggregation-annihilation process are different from the previous exponents obtained by different methods. The time dependence of the total number of clusters and the total mass of clusters are analytically obtained.

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**Key words:** complete aggregation-annihilation process, incomplete aggregation-annihilation process, scale exponents

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